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EXAMINER

HOM, SHICK C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/887,676	Applicant(s) HEUER, VOLKMAR	
	Examiner Shick C Hom	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/23/01, 8/19/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 6-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/23/01, 8/19/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. Figures 1 and 2 should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2666

Claim Objections

3. Claims 5 and 13-16 are objected to because of the following informalities: In claim 5 lines 1-2, the words "an address table" seem to refer back to the "address table" recited in claim 1 line 13. If this is true, it is suggested changing "an address table" to ---the address table---. In claim 13 line 8 delete the "data transmission network" and insert ---data transmission system--- as in claim 13 line 2, for consistency. Claims 14-16 are objected to because they depend from objected claim 13. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15 line 3 which recite "the network address" lacks clear antecedent basis because no network address have been previously recited in the claims and therefore the limitation is not clearly understood. Likewise, claim 16 line 5 which recite "the incoming subunits" lacks clear antecedent basis.

Art Unit: 2666

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 3, 13, and 14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,236,660.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following:

Claim 1 of U.S. Patent No. 6,236,660 disclose a multiplexer for a synchronous digital hierarchy SDH data transmission system, comprising: a first interface adapted to receive data packets, each data packet being structured in accordance with the Internet Protocol IP and comprising a destination address; a memory in which a routing table is stored having entries regarding a plurality of virtual connections which are

Art Unit: 2666

established by use of virtual containers VC of the SDH transmission system; an IP routing matrix, connected to said memory and to said first interface, for evaluating the destination address of each data packet and for making a decision, on the basis of said destination address and said routing table, as to which one of the virtual connections shall be used to transmit each data packet; processing means, coupled to an output of said IP routing matrix, for packing each data packet into one of said virtual containers VC which corresponds to the chosen virtual connection; and an SDII second interface, coupled to an output of said processing means, for transmitting said one virtual container (VC), as a subunit of a synchronous transport module STM-N, through the SDH transmission system (see claim 1);

Application's claim 1 merely broaden the scope of the U.S. Patent No. 6,236,660 claim 1 by eliminating the network element for transmission being a multiplexer, means for evaluating the target address being an IP routing matrix, the packets being structured in accordance with the Internet Protocol IP, the processing means for packing the data packet into virtual containers, the SDH second interface for transmitting the virtual container as a subunit of a synchronous transport module, and calling the destination address as target address,

Art Unit: 2666

and virtual containers as subunits as in claim 1. Likewise, the application's claim 13 merely broaden the scope of U.S. Patent No. 6,236,660 claim 1 by eliminating the network element for transmission being a multiplexer, the packets being structured in accordance with the Internet Protocol IP, the processing means for packing the data packet into virtual containers, the SDH second interface for transmitting the virtual container as a subunit of a synchronous transport module, and calling the destination address as target address as in claim 1.

Application's claim 3 which depend from claim 1 recites the data packets being structured in accordance with the internet protocol as recited in U.S. Patent No. 6,236,660 claim 1, and therefore broaden U.S. Patent No. 6,236,660 claim 1. Likewise, application's claim 14 which depend from claim 13 recites the network element being a multiplexer as recited in U.S. Patent No. 6,236,660 claim 1, and therefore broaden U.S. Patent No. 6,236,660 claim 1. It has been held that the omission of a element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Art Unit: 2666

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Dobbins et al. 95,951,649).

Regarding claim 13:

Dobbins et al. disclose the network element (NE) for a synchronous digital data transmission system (see Fig. 3A and col. 15 lines 29-64 which describes a synchronous network), characterized by means of an interface (IN) by way of which the network element receives data packets with a target address, a memory (MEM) in which an address table (TAB) is stored, which has entries regarding logical virtual connections between network elements of the synchronous digital data transmission network (SDH), means (IPADR) for evaluating the target address

Art Unit: 2666

of data packets, means (SEL) for making a decision on the basis of the target address and the address table as to which one of the virtual connections is used to transmit a data packet (see col. 7 lines 52-67 which recite the interface receiving the data packet and extracting the destination network address including the use of a look-up table in memory for determining the best route to the destination network address which clearly anticipate the address table stored in memory used to make the decision as to which connections is used to transmit the data packet).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobbins et al. (5,951,649) in view of Kawasaki et al. (6,031,820).

Art Unit: 2666

Regarding claim 1:

Dobbins et al. disclose the method for transmitting data packets (DAT) by way of a synchronous digital data transmission network (SDH) (see Fig. 3A and col. 15 lines 29-64 which describes a synchronous network), wherein virtual connections (LV1 - V4) are entered into an address table (TAB), that in at least one part of the network elements (NEI - NEn, MUX1, MUX2, CC1, CC2) of the synchronous digital data transmission network, an evaluation of the target address (ZAD) of the data packets (DAT) takes place and that at least for a part of the data packets (DAT) from at least one of the network elements of the synchronous digital data transmission network, on the basis of the address table (TAB) and the target address (ZAD), a decision is made as to which one of the virtual connections (LV1 - LV4) is used to transmit this data packet (see col. 7 lines 52-67 which recite the interface receiving the data packet and extracting the destination network address including the use of a look-up table in memory for determining the best route to the destination network address which clearly anticipate the address table stored in memory used to make the decision as to which connections is used to transmit the data packet) as in claim 1.

Regarding claims 2-3:

Art Unit: 2666

Dobbins et al. disclose wherein the data packets (DAT) come from a local area network (LAN) as in claim 2 and wherein the data packets (LAN) are structured in accordance with the internet protocol as in claim 3 (see col. 4 line 66 to col. 5 line 2 which recite the local area network and the internet). Regarding claim 4:

Dobbins et al. disclose wherein the target address (ZAD) is comprised of a network address (NAD) and a host address (HAD) and only the network address (NAD) is evaluated in the network elements (see col. 7 lines 47-51 and col. 12 lines 10-15 which recite the use of destination address and the host address). Regarding claim 5:

Dobbins et al. disclose wherein an address table (TAB) is stored in each network element and is prepared by a central network management system (TMNIP) (see col. 27 lines 56-63 which recite the interface resource table created and managed by the common managed information base MIB).

For claim 1, Dobbins et al. disclose all the subject matter of the claimed invention with the exception of providing wherein the data packets (DAT) are packed into transport modules, characterized in that the subunits (VC) of transport modules of the same size are used in order to establish logical virtual

Art Unit: 2666

connections between network elements (NEI - NEn, MUX1, MUX2, CC1, CC2) of the digital data transmission network.

Kawasaki et al. from the same or similar fields of endeavor teach that it is known to provide wherein the data packets (DAT) are packed into transport modules, characterized in that the subunits (VC) of transport modules of the same size are used in order to establish logical virtual connections between network elements (NEI - NEn, MUX1, MUX2, CC1, CC2) of the digital data transmission network (see col. 17 lines 43-62 which recite means inputting data into successive fixed-length cells). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide wherein the data packets (DAT) are packed into transport modules, characterized in that the subunits (VC) of transport modules of the same size are used in order to establish logical virtual connections between network elements (NEI - NEn, MUX1, MUX2, CC1, CC2) of the digital data transmission network as taught by Kawasaki et al. in the communications network of Dobbins et al. The means wherein the data packets (DAT) are packed into transport modules, characterized in that the subunits (VC) of transport modules of the same size are used in order to establish logical virtual connections between network elements (NEI - NEn, MUX1, MUX2, CC1, CC2) of the digital data

Art Unit: 2666

transmission network can be implemented by connecting the means wherein the data packets (DAT) are packed into transport modules of Kawasaki et al. into the means for inputting packets into the interface of Dobbins et al. The motivation for using providing wherein the data packets (DAT) are packed into transport modules, characterized in that the subunits (VC) of transport modules of the same size are used in order to establish logical virtual connections between network elements (NEI - NEn, MUX1, MUX2, CC1, CC2) of the digital data transmission network as taught by Kawasaki et al. in the communication network of Dobbins et al. being that it provides more efficiency for the system since the interface do not need to align/realign packets and therefore increase transfer speed at the interface.

Allowable Subject Matter

11. Claims 6-12, 14 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

12. Claims 15-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2666

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Acharya et al. disclose method for internet protocol switching over fast ATM cell transport.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANSTON
PRIMARY EXAMINER